

read or write directly to the storage resource based on the description.--

*A4
Cancelled
B1*

--29. (New) The system of claim 28 wherein the client configured to read and write data blocks associated with the file system.--

--30. (New) The system of claim 28 wherein the client configured to read and write files associated with the file system.--

--31. (New) The system of claim 30 wherein the client configured to determine a block and offset associated with a file based on a file identifier.--

--32. (New) The system of claim 30 wherein the client configured to determine a block list associated with a file based on an offset into the file and a length.--

REMARKS

The applicant amends the claims in the application to more clearly describe the invention. Entry into the file wrapper is requested.

Claims 4, 5, and 10 have been cancelled.

Claims 1-3, 6, and 11-15 have been amended.

Claims 16-32 have been added.

Attached is a marked-up version of the changes being made by the current amendment.

Applicant : Stephen A. Rago
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Page : 6

Attorney's Docket No.: 07072-133001 / CS-002

Applicant asks that all claims be examined. Enclosed is a check in the amount of \$456.00 for excess claim fees. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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Version with markings to show changes made

--1. (Amended) A method for use in a [self-describing] file system including at least one server and one disc storage device for access by at least one client, [including] said method comprising the steps of:

- a. attaching said client to said file system; and
- b. reading a formal description of the file system by said client from said disc storage device, wherein said client can [substantially directly] read and write [files or blocks of] data to and from said disc storage device without requiring further knowledge of said file system.--

--2. (Amended) The method of claim 1 wherein step b. further comprises the step of:
[c.] reading enough information to determine the physical block and offset containing a given file's inode given its inode number.--

--3. (Amended) The method of claim 2 wherein step b. further comprises the step of:
[d.] reading enough information to determine the block list of a given file given an offset into the file and a length.--

--6. (Amended) The method of claim 5 wherein step a. comprises the steps of:
[e.] sending a mount request; and,
[f.] receiving a mount response.--

--11. (Amended) A self-describing file system comprising:
a disc storage [means] device for storing [files and] data;
a file server [means] attachable to said disc storage [means] device for accessing said disc storage [means] device; and,
a client [means] connected to said file server [means; and],
[formal description obtaining means within said] wherein said client [means for obtaining] obtains a formal description of the file system from the disc storage [means] device

containing the file system, and wherein said client can [substantially directly] read and write [files or blocks of] data to and from said disc storage [means] device without requiring further knowledge of said file system.--

--12. (Amended) The system of claim 11 wherein said [formal description obtaining means includes means for reading] client is configured to read enough information to determine the physical block and offset containing a given file's inode given its inode number.--

--13. (Amended) The system of claim 12 wherein said [formal description obtaining means further includes means for] client is configured for reading enough information to determine the block list of a given file given an offset into the file and a length.--

--14. (Amended) The system of claim 13 wherein said disc storage [means] device is located in a Storage Area Network (SAN).--

--15. (Amended) The [method] system of claim 13 wherein said client is located on said server.--

Please add the following claims 16-32:

--16. A method for reading or writing data from a storage source comprising:
acquiring a description of a file system associated with a storage resource; and
reading or writing directly to the storage resource based on the description.--

--17. The method of claim 16 for reading or writing data blocks associated with the file system--.

--18. The method of claim 16 further including:
determining a block and an offset associated with a file on said file system based on a file identifier.--

- 19. The method of claim 18 further including:
 - determining a block list associated with a file based on an offset into the file and a length.--
- 20. An apparatus for reading and writing data from a storage resource configured to:
 - acquire a description of a file system associated with a storage resource; and
 - reading or writing directly to the storage resource based on the description.--
- 21. The apparatus of claim 20 which includes a computer configured to read and write data blocks associated with the file system--
- 22. The apparatus of claim 20 which includes a computer configured to read and write files associated with the file system--
- 23. The apparatus of claim 22 wherein the computer is configured to determine a block and offset associated with a file based on a file identifier.--
- 24. The apparatus of claim 22 wherein the computer is configured to determine a block list associated with a file based on an offset into the file and a length.--
- 25. An article comprising a computer-readable medium that stores computer executable instructions for causing a computer to:
 - acquiring a description of a file system associated with a storage resource; and
 - reading or writing directly to the storage resource based on the description.--
- 26. The article of claim 25 wherein the article includes instructions for causing the computer to write data blocks associated with the file system.--

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Page : 10

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--27. The article of claim 25 wherein the article includes instructions for causing the computer to write files associated with the file system.--

--28. A system comprising:

a server configured to:

send a file system description associated with a storage resource to a client; and
a client configured to:

receive the file system description from the server, and

read or write directly to the storage resource based on the description.--

--29. The system of claim 28 wherein the client configured to read and write data blocks associated with the file system.--

--30. The system of claim 28 wherein the client configured to read and write files associated with the file system.--

--31. The system of claim 30 wherein the client configured to determine a block and offset associated with a file based on a file identifier.--

--32. The system of claim 30 wherein the client configured to determine a block list associated with a file based on an offset into the file and a length.--